# Exhibit 46

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# Mifepristone Adverse Events Identified by Planned Parenthood in 2009 and 2010 Compared to Those in the FDA Adverse Event Reporting System and Those Obtained Through the Freedom of Information Act

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#### **Abstract**

**Background:** As part of the accelerated approval of mifepristone as an abortifacient in 2000, the Food and Drug Administration (FDA) required prescribers to report all serious adverse events (AEs) to the manufacturer who was required to report them to the FDA. This information is included in the FDA Adverse Event Reporting System (FAERS) and is available to the public online. The actual Adverse Event Reports (AERs) can be obtained through the Freedom of Information Act (FOIA).

**Methods:** We compared the number of specific AEs and total AERs for mifepristone abortions from January I, 2009 to December 31, 2010 from I. Planned Parenthood abortion data published by Cleland et al. 2. FAERS online dashboard, and 3. AERs provided through FOIA and analyzed by Aultman et al.

**Results:** Cleland identified 1530 Planned Parenthood mifepristone cases with specific AEs for 2009 and 2010. For this period, FAERS online dashboard includes a total (from all providers) of only 664, and the FDA released only 330 AERs through FOIA. Cleland identified 1158 ongoing pregnancies in 2009 and 2010. FAERs dashboard contains only 95, and only 39 were released via FOIA.

**Conclusions:** There are significant discrepancies in the total number of AERs and specific AEs for 2009 and 2010 mifepristone abortions reported in I. Cleland's documentation of Planned Parenthood AEs, 2. FAERS dashboard, and 3. AERs provided through FOIA. These discrepancies render the FAERS inadequate to evaluate the safety of mifepristone abortions.

#### **Keywords**

mifepristone, misoprostol, adverse drug reaction reporting systems, drug-related side effects and adverse reactions, postmarketing product surveillance, induced abortion, steroidal abortifacient agents, United States food and drug administration

# Introduction

The accelerated approval of mifepristone in the United States (US) in 2000 included post-marketing restrictions to monitor safety. Prescribers were required to report any ongoing pregnancies, hospitalizations, transfusions, and other serious events to the manufacturer, who was required to submit them to the Food and Drug Administration (FDA). Adverse events (AEs) are documented in the FDA Adverse Event Reporting System (FAERS), available online. Copies of the actual Adverse Event Reports (AERs) can be obtained via the Freedom of Information Act (FOIA).

A paper published by Cleland et al. analyzed eight adverse events/outcomes (AEs) from mifepristone abortions at 63

days and less performed by Planned Parenthood in 2009 and 2010. They analyzed hospital admissions, blood transfusions, emergency department (ED) treatments, intravenous (IV)

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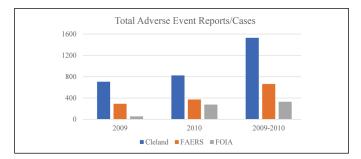
antibiotics, infections requiring IV antibiotics or hospitalization, deaths, ongoing pregnancies, and ectopic pregnancies. Cleland explained that Planned Parenthood reports all significant AEs to Danco Laboratories, which submits them to the FDA, per the mifepristone prescribing information. Their analysis for these specific AEs led them to conclude that, "Among the 233 805 medical abortions provided at Planned Parenthood health centers in 2009 and 2010, significant adverse events or outcomes were reported in 1530 (0.65%) cases." Unless associated with another AE, they did not include data on incomplete abortion managed at Planned Parenthood or hemorrhage without transfusion, two of the most common AEs resulting from mifepristone abortion. They also admit that "we cannot exclude the possibility that some clinically significant adverse events or outcomes were not included. Some patients may have experienced a significant adverse event or outcome but did not follow up after their medical abortion."4 Cleland did not provide the loss to follow-up rate.

In 2021, Aultman et al. published an analysis of the AERs for mifepristone abortion from September 2000 to February 2019 (excluding those published by Gary in 2006) utilizing AERs obtained through FOIA. 5,6

The objective of this paper was to compare the total number of AERs/cases (which may include more than one AE) and the individual AEs identified by Cleland for 2009 and 2010 mifepristone abortions from three sources: those identified by Planned Parenthood as published by Cleland, those currently posted on the FAERS dashboard, and those provided by the FDA in response to FOIA and analyzed by Aultman.

#### **Methods**

We searched the FAERS dashboard for any US AERs related to mifepristone abortion occurring from January 1, 2009 through December 31, 2010 and tabulated the total number of AERs, hospital admissions, deaths, ongoing pregnancies, and ectopic pregnancies. The FAERS did not have enough information to evaluate for transfusion, ED visits, IV antibiotics, or infections requiring IV antibiotics or hospital admission. Since FAERS does not provide the "abortion date," we used the "event date"; in cases where there was no "event date," we used the "latest manufacturer received date." We evaluated Aultman's



**Figure 1.** Comparison of total adverse event reports from three sources.

AERs for the events in Cleland and confirmed any missing reports by searching the 6158 pages of AERs related to mifepristone abortion obtained by FOIA. In analyzing FOIA data, Aultman accounted for duplicates. In the FAERS data, we accounted for duplicates for deaths and ectopic pregnancies, but FAERS did not provide sufficient detail to do so for hospital admissions and ongoing pregnancies. We then compared the total number of reports, as well as hospitalizations, ongoing pregnancies, ectopic pregnancies, and deaths from Cleland, FAERS, and FOIA AERs for 2009 and 2010. Adverse events not reported by Cleland were not evaluated. The FAERS and FOIA total AERs include reports from all sources, not just from Planned Parenthood, and include all reports for those years, not just those with the eight AEs evaluated by Cleland.

# **Results**

Our analysis shows significant discrepancies between the number of AERs identified by Planned Parenthood as reported in Cleland, the number in the FAERS database, and the number received under FOIA. There are also discrepancies in the number of hospitalizations, ectopic pregnancies, and ongoing pregnancies.

# Total Reports (Figure 1)

Cleland identified 1530 cases involving eight specific AEs after Planned Parenthood mifepristone abortion in 2009 and 2010. The FAERS dashboard contains only 664 AERs for this period, and only 330 were provided through FOIA. Both include AERS with other types of adverse events not included by Cleland and include reports from all sources, not just Planned Parenthood.

# Specific Adverse Events/Outcomes (Table 1)

Cleland identified 548 ongoing pregnancies after mifepristone abortion in 2009, the FAERS dashboard includes just 56, and only seven were received via FOIA. For 2010, Cleland identified 610 ongoing pregnancies, FAERS contains just 39, and only 32 were obtained via FOIA. Cleland identified 70 hospital admissions in 2009 and 65 in 2010. FAERS includes 87 and 125, respectively, but the FDA only provided 14 and 94 via FOIA. Ectopic pregnancy, although not caused by mifepristone, is a contraindication to its use. Cleland reported eight ectopic pregnancies in 2009 and eight in 2010. FAERS includes eight for 2009 and nine for 2010. The FOIA AERs have only one ectopic for 2009 and eight for 2010. Cleland reported no deaths in 2009 and one in 2010. FAERS and FOIA were consistent with one death in 2009 and two in 2010.

## **Discussion**

The total number of AEs published in Cleland is significantly higher than the number in the FAERs database, even though Cleland did not evaluate all AEs, including Cirucci et al. 3

Table 1. Comparison of Number of Specific Adverse Events<sup>a</sup> from Three Sources.

	2009			2010			Total 2009 to 2010		
	Cleland	FAERS <sup>b</sup>	FOIA	Cleland	FAERS <sup>b</sup>	FOIA	Cleland	FAERS <sup>b</sup>	FOIA
Hospital Admission	70	87	14	65	125	94	135	212	108
Transfusion	42		10	72		59	114		69
ED Treatment	87		27	151		105	238		132
IV Antibiotics	23		5	34		27	57		32
Infection requiring IV Antibiotics or Admission	14		4	23		21	37		25
Death	0	1	I	ı	2	2	I	3	3
Ongoing Pregnancy	548	56	7	610	39	32	1158	95	39
Ectopic Pregnancy	8	8	I	8	9	8	16	17	9

<sup>&</sup>lt;sup>a</sup>Events are not mutually exclusive.

failed abortions treated at Planned Parenthood.4 The discrepancy is particularly concerning because the total number of AEs and AERs in the FAERS should be significantly higher than Cleland since Planned Parenthood performs only 37% of US abortions.7 It is unclear why so many cases identified by Planned Parenthood in Cleland do not appear in FAERS. Cleland states, "In accordance with the mifepristone prescribing information, Planned Parenthood Federation of America reports all significant adverse events and outcomes to Danco Laboratories, the US distributor of mifepristone, which in turn reports them to the FDA."4 If this claim is true, then either Danco did not report a significant number of adverse events to the FDA, or the FDA did not include them in FAERS. It also raises the question of whether FAERS includes all complications reported by the other 63% of abortion providers.

We are concerned that FDA and others will continue to rely on Cleland's statement, "significant adverse events or outcomes were reported in 1530 (0.65%) cases" to claim that the complication rate for the abortion pill regimen is low. Although Cleland's paper is a study of over 200 000 abortions and is cited extensively in support of the safety of medical abortion<sup>8–11</sup> the analysis excludes the most common adverse events (retained products of conception and hemorrhage not requiring transfusion). Additionally, Cleland's reported complication rate of 0.65% is only a report of the complications known to Planned Parenthood. Cleland does not report the percent of patients lost to follow-up.<sup>4</sup>

There is also concern that the FDA will continue to rely on the FAERS to make decisions about removing mifepristone REMS, despite the findings herein that FAERS does not include all the events even known to the abortion provider. To compound this problem, in 2016, the FDA eliminated the requirement to report adverse events resulting from mifepristone other than death. Nevertheless, in her April 12, 2021 letter to the American College of Obstetricians and Gynecologists, FDA Commissioner Janet Woodcock stated

that, based on a review of post-marketing AEs from January 27, 2020, to January 12, 2021, the in-person dispensing requirements in the mifepristone REMS would not be enforced.<sup>13</sup> It is alarming that policy decisions that affect women's safety are based on a lack of information in the FAERS. Whether the inaccuracy of FAERS extends to required reporting for other medications is unknown to us, but the findings in this paper have significant implications for drug safety evaluation in general.

The ability of the FAERS to accurately identify complications from mifepristone abortion depends on 1. the abortion provider being aware of the adverse event, 2. the provider reporting the adverse event to the manufacturer, 3. the manufacturer reporting to the FDA, and 4. the FDA including the event in the FAERS. One problem inherent in this system is that adverse events unknown to the abortion provider or occurring in patients lost to follow-up will be missed. In addition, ED physicians or treating physicians other than the abortion provider were never obligated to report and may not even be aware of the system. For those events known to Planned Parenthood, it is unclear whether the error occurred in the abortion provider reporting to the manufacturer, the manufacturer reporting to the FDA, or the FDA uploading to the database.

FDA compliance in response to FOIA requests is required by law.<sup>3</sup> The number of AERs supplied under FOIA is much lower than the number in the FAERS database and known to the FDA at the time. Although there may be extenuating circumstances requiring that some information be withheld, withholding information, especially to this extent, interferes with independent, scientific analysis necessary to validate claims of safety and efficacy.

# Strengths and Limitations

One of the limitations of this study is that Cleland only reported on a limited number of possible AEs. Because of the scant information included in the FAERS, we could not even compare all AEs reported by Cleland. Since we do not have

<sup>&</sup>lt;sup>b</sup>If blank, FAERS dashboard does not provide this detail.

access to the Planned Parenthood records, reports cannot be evaluated on a patient-by-patient basis but only as a composite.

One of the strengths of this study is that it is the first known study comparing FAERS data with an outside report of mifepristone complications.

#### **Conclusions**

There are significant discrepancies in the number of AEs and total AERs reported for 2009 and 2010 mifepristone abortions identified by Planned Parenthood as reported by Cleland, those in FAERS, and those provided by FOIA, impugning the reliability of FAERS to evaluate the safety or efficacy of mifepristone abortions at a time when the FDA is under pressure to eliminate REMS on mifepristone. 14,15 The FDA used their review of post-marketing adverse events that occurred in 2020 and 2021 as a rationale for removing the in-person dispensing requirements for mifepristone during COVID, even though reporting requirements (other than death) were eliminated in 2016. 13 Whether Planned Parenthood did not submit all the AEs to Danco, Danco did not submit all to the FDA, or the FDA did not include all is unknown. By withholding a significant number of AERs, the FDA did not adequately comply with the FOIA request by the authors of the Aultman paper, hampering their ability to analyze the data. These discrepancies, and the fact that since 2016, reporting AEs other than deaths is no longer required, 12 demonstrate that the FAERS is inadequate to evaluate the safety of mifepristone.

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# **Author biographies**

Christina A. Cirucci, MD received her Bachelor of Science in Mechanical Engineering from Virginia Tech in Blacksburg, VA and her MD from Thomas Jefferson University, Philadelphia, PA. She completed her residency in obstetrics and gynecology at the Medical College of Virginia in Richmond, VA. She is a diplomate of the American Board of Obstetrics and Gynecology and a life Fellow of the American College of Obstetricians and Gynecologists. She is a member of the Christian Medical and Dental Associations, the North American Menopause Society, the Pennsylvania Medical Society, and the Allegheny County Medical Society. She is a board member of the American Association of Pro-Life Obstetricians and Gynecologists. She worked in private practice for twenty years in Pittsburgh, PA.

**Kathi A. Aultman**, MD received her B.A. from Drew University in 1972, earned her MD at the University of Florida College of Medicine in 1977, and completed her OB/GYN Residency at the University of Florida affiliated Jacksonville Health Education Program in 1981. She is a diplomate of the American Board of

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**Donna J. Harrison**, MD received her MD from the University of Michigan and completed her OBGYN residency at a University of Michigan affiliate hospital (St. Joseph Mercy Hospital). She is a diplomate of the American Board of Obstetrics and Gynecology. She is currently CEO of the American Association of Pro-Life Obstetricians and Gynecologists.